

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 1650 Arch Street

# Philadelphia, Pennsylvania 19103-2029

Honorable Joseph R. Pitts Member, House of Representatives Post Office Box 837 Unionville, PA 19375

NOV - 6 :908

Dear Congressman Pitts:

I am writing in response to your letter of September 22, 1998, regarding concerns on the part of one of your constituents, Ms. Irene M. Hollywood of Kennett Square, Pennsylvania. Ms. Hollywood raised concerns about the high cost of auto emissions testing.

In her letter, Ms. Hollywood expressed that she is on a fixed income, and that the cost of auto emissions testing (she indicated a range of \$40 to \$70) is outrageous, particularly in light of her financial status. Furthermore, her letter mentions that if the auto emissions program is state-oriented, the state should pay the costs of testing.

To provide some background, the federal government does mandate, through the Clean Air Act as amended in 1990, the creation of enhanced inspection and maintenance (or I/M) programs in portions of Pennsylvania. These programs are designed to require the testing of nearly all passenger cars and trucks, in order to identify those vehicles that are not functioning as they were designed and built which is to emit low emission levels. In the case of a vehicle that is found to have "high" emissions that fails the test, the I/M program is premised upon the notion that it is the motorist's responsibility to repair that vehicle to lower the vehicle's emissions.

Let me state that EPA has provided states the flexibility to design their own I/M programs to tailor those individual programs to their own needs, so long as such programs can meet the emissions reduction goals set by EPA. Pennsylvania was provided the choice on how to fund the program either through test fees, registration surcharges, or through the Commonwealth's general fund. Pennsylvania has traditionally chosen the route of a capped test fee. In its most recent iteration of the program, Pennsylvania has chosen to no longer regulate emissions test fees, instead allowing a system of "market-based" fees, as has been done in the past with the Commonwealth's motor vehicle safety inspection program.

Perhaps more importantly, when designing its new enhanced I/M program, Pennsylvania chose to adopt a privatized, decentralized testing network which relies upon a system which consists primarily of automotive service facilities that could perform both emissions testing and repairs.



The impetus for this decision was to allow the motorist the convenience of one stop shopping, which could also couple safety and emissions testing. The alternative was to design a system of fewer, centralized test-only stations, which would require motorists to travel further for inspections, and for those who failed, would require a trip to a separate service facility, and then back for a re-inspection. In designing this system, Pennsylvania decided that motorists desire for convenience offered by a test-and-repair network of several thousand stations across the state would outweigh the additional cost savings offered by the economy of scale of fewer testing facilities.

As you may recall, Pennsylvania initially designed its enhanced I/M program around a very limited number of test-only stations using extremely high-tech equipment that would have cost motorists a capped testing fee of \$17-20. However, in 1994 that program was abandoned (before testing ever began) in favor of the current decentralized program, which consists of a network of over 2,000 test-and-repair stations in Pittsburgh and Philadelphia, and which has fees that are market driven.

While I sympathize with your constituent's concerns, there is little EPA can do to remedy her concerns. EPA believes in the I/M program as a means to significantly reduce in-use motor vehicle emissions, and the Clean Air Act specifically mandates states to adopt such programs in certain designated areas which includes portions of Pennsylvania. The Agency is prohibited by both the Clean Air Act, and by the National Systems Designation Act of 1995, from blocking a state's choice of I/M program design. However, centralized testing does offer an inherent economy of scale cost savings over a larger, decentralized program network.

In closing let me reiterate that Pennsylvania chose the current emissions inspection program design, and the associated test fee structure for that program. Pennsylvania, in conjunction with the local American Automobile Association, has been monitoring typical emissions test fees for both the Philadelphia and Pittsburgh areas. Those fees have dropped since the program began, and have more or less stabilized. Since test fees can vary considerably from station to station, motorists concerned about the cost of testing are encouraged to "shop around" for the lowest fees. Some stations even advertise specials and discounts for emissions testing. Also, emissions testing and repairs (and safety inspections) need not be performed by the same facility.



Thank you for the opportunity to respond to your concerns. If you have further questions about this matter, please feel free to contact me or have your staff contact Mr. Christopher P. Thomas, Pennsylvania Liaison Officer at (215) 814-5555.

Sincerely,

W. Michael McCabe

Regional Administrator

## **Controlled Correspondence For REGION 3**

#### Congressional

CONTROL NO: R3-9802190-C

ALT NO:

R3-9802008-C

EXT. DUE DATE:

**ORIGINAL DUE DATE:** 

CORR. DATE:

REC. DATE:

CLOSED DATE:

11/13/98

10/19/98 10/29/98

STATUS:

PENDING

FROM:

PITTS JOSEPH R.

ORGANIZATION:

HOUSE OF REPRESENTATIVES

SALUTATION:

DEAR CONGRESSMAN PITTS

RECEIVED

CONSTITUENT:

HOLLYWOOD, IRENE M.

TO:

MCCABE/W. MICHAEL

TO ORG:

REGIONAL ADMINISTRATOR

Deputy Director (3A700)

SUBJECT:

**AUTO EMISSION TESTING** 

SIGNATURE:

REGIONAL ADMINISTRATOR

CC'S:

OFFICE OF COMMUNICATIONS AND GOVERNMENT RELATIONS

RA/DAN RYAN

ASSIGNED:

AIR PROTECTION DIVISION

R3 INSTRUCTIONS:

PLEASE RESPOND TO LOCAL/DISTRICT OFFICE AS INDICATED ON INCOMING

LETTER.

PLEASE USE THIS CLOSING SENTENCE: IF YOU HAVE ANY QUESTIONS, PLEASE

FEEL FREE TO CONTACT ME OR HAVE YOUR STAFF CONTACT MR.

CHRISTOPHER P. THOMAS, PENNSYLVANIA LIAISON OFFICER, AT 215-814-5555.

HAND CARRY CORRESPONDENCE TO THE OFFICE OF COMMUNICATIONS AND GOVERNMENT RELATIONS, 16TH FLOOR, CUBICLE #115.

R3 ADDTN'L INST:

R3 COMMENTS:

PLEASE SEE R3-9802008-C.

	Assigned	Date Assigned	Code/Status	Date Completed by Assignee	Date Returned to R3:
Lead	AIR PROTECTION DIVISION	10/30/98	ACTION	·	-

## JOSEPH R. PITTS

COMMITTEES:
BUDGET
TRANSPORTATION
AND INFRASTRUCTURE
SMALL BUSINESS
ASSISTANT REPUBLICAN WHIP

SSISTANT REPUBLICAN WHI

Internet Address: pitts.pa16@mail.house.gov

> Web Page: www.house.gov/pitts

# Congress of the United States House of Representatives

Washington, DC 20515-3816

October 19, 1998

# RECEIVED

BILL WICHTERMAN—CHIEF OF STAFF
TOM TILLETT—DISTRICT DIRECTOR

PLEASE RESPOND TO:

- ☐ 504 CANNON BUILDING WASHINGTON, DC 20515 (202) 225–2411
- POST OFFICE BOX 837
  UNIONVILLE, PA 19375
  (610) 429-1540
- DOWNINGTOWN, PA 19335 (610) 518-5823
- LANCASTER CO. COURTHOUSE
  50 NORTH DUKE STREET
  LANCASTER, PA 17602
  (717) 393–0667

OCT 2 6 1993

Mr. W. Michael McCabe

Regional Administrator

U.S. Environmental Protection Agency

Region III

841 Chestnut Street

Philadelphia, Pennsylvania 19107-4431

Dear Mr. McCabe:

My records indicate that I have not received any information from you since my letter of September 22, 1998 concerning Irene M. Hollywood's complaint regarding the cost of Auto Emission Testing being unreasonably high.

I would appreciate it if you would furnish me with a response at your earliest opportunity.

Please respond to my Kennett office: Post Office Box 837

Post Office Box 837 Unionville, PA 19375 (610) 444-4581

Cordially

Joseph R. Pitts Member of Congress

JRP/esl

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

The impetus for this decision was to allow the motorist the convenience of one stop shopping, which could also couple safety and emissions testing. The alternative was to design a system of fewer, centralized test-only stations, which would require motorists to travel further for inspections, and for those who failed, would require a trip to a separate service facility, and then back for a re-inspection. In designing this system, Pennsylvania decided that motorists desire for convenience offered by a test-and-repair network of several thousand stations across the state would outweigh the additional cost savings offered by the economy of scale of fewer testing facilities.

As you may recall, Pennsylvania initially designed its enhanced I/M program around a very limited number of test-only stations using extremely high-tech equipment that would have cost motorists a capped testing fee of \$17-20. However, in 1994 that program was abandoned (before testing ever began) in favor of the current decentralized program, which consists of a network of over 2,000 test-and-repair stations in Pittsburgh and Philadelphia, and which has fees that are market driven.

While I sympathize with your constituent's concerns, there is little EPA can do to remedy her concerns. EPA believes in the I/M program as a means to significantly reduce in-use motor vehicle emissions, and the Clean Air Act specifically mandates states to adopt such programs in certain designated areas -- including portions of Pennsylvania/ The Agency is prohibited by both the Clean Air Act, and subsequently by language in the National Systems Designation Act of 1995, from blocking a state's choice of I/M program design to require centralized testing (which offers and inherent economy of scale cost savings over a larger, decentralized program network).

In closing let me reiterate that Pennsylvania chose the current emissions inspection program design, and the associated test fee structure for that program. Pennsylvania, in conjunction with the local American Automobile Association, has been monitoring typical emissions test fees for both the Philadelphia and Pittsburgh areas. Those fees have dropped since the program began, and have more or less stabilized. Since test fees can vary considerably from station to station, motorists concerned about the cost of testing are encouraged to "shop around" for the lowest fees. Some stations even advertise specials and discounts for emissions testing. Also, emissions testing and repairs (and safety inspections )need not be performed by the same facility.

Thank you for the opportunity to respond to your concerns. If you have further questions about this matter, please feel free to contact me or have your staff contact Mr. Christopher P. Thomas, Pennsylvania Liaison Officer at (215) 814-5555.

Sincerely,

W. Michael McCabe Regional Administrator

g:/user/share/congress/pitts.bkr CONCURRENCES SYMBOL 3AT21 3AT21 3AT00 3CG10 3RA00 REHN KATZ THOMAS VOLTAGGIO 10/16 EPA Farm 1320-1 (12-70) OFFICIAL FILE COPY





#### COMMONWEALTH OF PENNSYLVANIA OFFICE OF THE GOVERNOR HARRISBURG

THE GOVERNOR

October 14, 1998

Ms. Carol Browner, Administrator U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460

Dear Ms. Browner:

As you are aware, I have called upon the U. S. Environmental Protection Agency (EPA) several times over the past two years to resolve ozone transport. Now, I am pleased to say, states and EPA are poised to resolve this issue. With implementation of the National Low Emission Vehicle (NLEV) program and final EPA action on both Pennsylvania's Section 126 Interstate Air Pollution Petition and the proposed Section 110 NOx State Implementation Plan (SIP) Call, transported pollution will be substantially reduced.

In October 1995, in a separate petition, I requested EPA to remove 37 Pennsylvania counties from the Ozone Transport Region. I am hereby petitioning EPA under Section 176A of the Clean Air Act (CAA) to also remove the following ten Pennsylvania counties from the Ozone Transport Region: Juniata, Snyder, Northumberland, Montour, Columbia, Luzerne, Wyoming, Lackawanna, Wayne, and Susquehanna. After implementation of stringent nitrogen oxide (NOx) controls to resolve transport as proposed by both Pennsylvania's 126 action and EPA's 110 SIP Call, these counties will not significantly interfere with attainment in any area in the region as required by Section 176A.

In 1997 the Ozone Transport Assessment Group (OTAG) completed their report on the regional transport of ozone and ozone precursor emissions. They concluded that regional reductions in NOx emissions are effective in producing broad regional ozone benefits; the more NOx reduced, the greater the benefit, while reductions in volatile organic compound (VOC) emissions are only effective locally in urban nonattainment areas. Implementation of ongoing new car standards and stringent regional NOx controls will effectively fulfill most of OTAG's efforts to reduce transport. As a result, these ten counties, along with the other 37, will have done their fair share to reduce transported ozone. Continuing to subject them to additional controls under Section 184 of the CAA, particularly for VOCs, will have no detectable benefit for downwind areas. However, removing them from the OTR would eliminate unwanted, unproductive and intrusive additional controls for areas where these controls are unnecessary.

Ms. Browner October 14, 1998 Page 2

Only one county (Lackawanna) of the subject ten has ever exceeded the one-hour ozone standard. That county has not had problems since the summer of 1988. Also, these counties are virtually at the new more restrictive 8-hour standard and will, at worst, be transitional areas under the new 8-hour ozone standard. With implementation of the NOx SIP Call/126 Petition, they will be well under the new standard.

On July 16, 1997, President Clinton signed a memorandum on "Implementation of Revised Air Quality Standards for Ozone and Particulate Matter" and issued the "Implementation Plan for Revised Air Quality Standards." The President called upon EPA to use a common sense, flexible approach to these standards and to work with state governments to this end. EPA has identified these ten counties as areas where the one-hour ozone standard and subpart 2 of Title I of the CAA no longer apply. Thus, removing these counties from the OTR is clearly consistent with current policy.

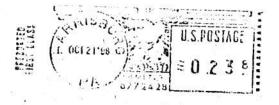
Therefore, I request that the counties identified in this second petition be removed from the ozone transport region, along with the 37 counties included in the first petition.

Sincerely,

Tom Ridge



Office of the Governor Harrisburg, Pennsylvania 17120 MAILED AT READING, PA DEOP SEMPLENT AUTHORICE HOW 26-1



Ms. Carol Browner, Administrator U.S. Environmental Protection Agency 401 M Street, SW Washington, DC 20460



## **Controlled Correspondence For REGION 3**

CONTROL NO: R3-9802195

ALT NO:

AX-9808348

**EXT. DUE DATE:** 

ORIGINAL DUE DATE:

CORR. DATE:

10/14/98 10/30/98

REC. DATE: CLOSED DATE:

STATUS:

UNCONTROLLED

FROM:

RIDGE TOM

ORGANIZATION:

PENNSYLVANIA GOVERNOR

RECEIVED

NOV 0 2 1998

Deputy Director (3APOO)

SALUTATION:

CONSTITUENT:

TO:

BROWNER/CAROL M.

TO ORG:

ADMINISTRATOR

SUBJECT:

CONCERN - REMOVAL OF 10 PENNSYLVANIA COUNTIES FROM THE OZONE

"RANSPORT REGION

SIGNATURE:

CC'S:

OFFICE OF COMMUNICATIONS AND GOVERNMENT RELATIONS

ASSIGNED:

AIR PROTECTION DIVISION

R3 INSTRUCTIONS:

R3 ADDTN'L INST:

R3 COMMENTS:

Lead	Assigned	Date Assigned	Code/Status	Date Completed by Assignee	Date Returned to R3:
Luad	AIR PROTECTION DIVISION	10/30/98	FOR YOUR INFORMATION		

## **S** EPA

## OFFICE OF THE EXECUTIVE SECRETARIAT CONTROL SLIP

DUE DATE:

CONTROL NO:

AX-9808348

ORIG. DUE DATE: 11/05/98

STATUS:

PENDING

CORRES. DATE:

10/14/98

RECEIVED DATE:

10/23/98

ASSIGNED DATE:

10/27/98

CLOSED DATE:

FROM:

RIDGE TOM

ORG:

PENNSYLVANIA GOVERNOR

SALUTATION:

DEAR GOVERNOR RIDGE

CONSTITUENT:

TO:

ADMINISTRATOR

TO ORG:

EPA

SUBJECT:

CONCERN- REMOVAL OF 10 PENNSYLVANIA COUNTIES FROM THE OZONE

TRANSPORT REGION

ASSIGNED:

COMMENTS:

AIR & RADIATION

SIGNATURE:

ASSISTANT ADMINISTRATOR

INSTs:

PREPARE REPLY FOR THE ASSISTANT ADMINISTRATOR'S SIGNATURE.

SEND COPY OF REPLY TO OEX.

ADDTN'L INST:

CC's:

**ADMINISTRATOR** 

DEPUTY ADMINISTRATOR

OCIR-MS. HILLER

OFFICE OF REGIONAL OPERATIONS

REGION 03

IMS:

MARY STODDARD-BOYD

IMT:

EARLINE MILLS/DC/USEPA/US

70	Assigned	Date Assigned	Code/Status	Date Completed by Assignee	Date Returned to OEX:
Lead	OAR	10/27/98	ACTION		-
	+	1		a	



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 841 Chestnut Building Philadelphia, Pennsylvania 19107-4431

Mr. James M. Salvaggio, Director Department of Environmental Protection Bureau of Air Quality Commonwealth of Pennsylvania Rachel Carson Office Building P.O. Box 8468 Harrisburg, Pennsylvania 17105-8468

May 20, 1998

Dear Mr. Salvaggio:

I am writing to discuss a matter of mutual importance to both Pennsylvania and EPA. That is the current status of EPA's approval of Pennsylvania's enhanced inspection & maintenance (I/M) program state implementation plan (SIP) and the status of the required demonstration of the effectiveness of your decentralized program, per the National Highway Systems Designation Act of 1995 (NHSDA).

As we have discussed, EPA's interim approval of Pennsylvania's plan lapses on August 27, 1998. Therefore on or before that date EPA must sign a rulemaking notice which removes the "interim" status of its approval of the enhanced I/M SIP. In order to do take this action, EPA must approve the program effectiveness evaluation which Pennsylvania must submit under the NHSDA. Because EPA granted final interim conditional approval of Pennsylvania's enhanced I/M SIP, full approval is also contingent upon Pennsylvania's submittal of a SIP revision to satisfy all of the remaining de minimus conditions identified in EPA's final conditional interim rulemaking. The Pennsylvania Department of Environmental Protection (PADEP) has already submitted SIP revisions to EPA that address the major conditions (with the exception of the requirement related to the long-term ongoing program evaluation), as well as several of the de minimus deficiencies. Brian Rehn faxed the list of the conditions that have been addressed in submittals already made by PADEP, and our staffs have mutually agreed as to which de minimus conditions remain to be addressed by the Commonwealth.

It will take a considerable effort on the part of both our agencies to ensure that all remaining de minimus SIP deficiencies, as well as the NHSDA program effectiveness evaluation, are addressed and submitted, in a timely manner. As I am sure you are aware, should the NHSDA interim approval lapse, the Commonwealth would immediately face sanctions. To prevent the interim approval from lapsing EPA must not only receive the plan, but must also sign a rulemaking notice proposing approval of the Commonwealth's plan by August 27, 1998.

Customer Service Holline: 1-800-438-2474

I want to stress that EPA wishes to work together with your staff to ensure that all requirements are addressed in a satisfactory manner, prior to the end of the interim approval period. Let me emphasize that EPA takes very seriously its duty to review your SIP revisions from November of 1997 and February of 1998. Toward that end, EPA is moving forward now to take rulemaking action upon those submittals. By completing rulemaking action on those submittals, the Agency action that must be signed on or before August 27, 1998 will only have to deal with the program effectiveness evaluation and the remaining de minimus conditions.

Given the importance of this matter, it is critical that we work together to ensure that the NHSDA program effectiveness demonstration envisioned by Pennsylvania will be both timely and approvable. We have reassigned all of Brian Rehn's other duties so that he is available to work on the Pennsylvania enhanced I/M SIP-related efforts. As PADEP and the Pennsylvania Department of Transportation (PENDOT) develop the submittal for the program evaluation and the remaining de minimus conditions, we commit to immediately acknowledge receipt of any draft materials sent to us for review and to establish the date by which we will provide comments. We would like to meet with PADEP and PENDOT as soon as possible to establish a work plan and an events timeline (including scheduling additional meetings) to ensure completion of the submittal such that the Agency's required rulemaking can be signed on or before August 27, 1998. We have proposed a meeting date of May 28, 1998. Please have Wick Havens of your staff advise David Arnold at (215) 566-2172 immediately as to whether the appropriate Commonwealth staff can meet on that date.

Sincerely,

Marcia L. Spink

Associate Director

Office of Air Programs

cc: Betty Serian, Deputy Secretary, PENDOT

Wick Havens, PA DEP Arleen Shulman, PA DEP Dukes Pepper, PA DEP





# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

#### 841 Chestnut Building Philadelphia, Pennsylvania 19107-4431

Honorable James M. Seif, Secretary
Department of Environmental Protection
Commonwealth of Pennsylvania
P.O. Box 2063

Harrisburg, Pennsylvania 17120-2063

Dear Mr. Seif:

The 1990 Clean Air Act Amendments (CAA) established a number of requirements intended to address widespread nonattainment of the national ambient air quality standard for ozone. The CAA also established deadlines for States to submit State Implementation Plan (SIP) revisions in accordance with these requirements. Because several States experienced significant difficulties in meeting certain of these requirements for ozone nonattainment areas classified as serious and above, EPA extended the deadlines for the SIP submittals. Specifically, EPA extended the deadline for submitting attainment demonstrations and for control measures providing for progress in reductions in ozone precursors. The time extensions were established in a memorandum entitled "Ozone Attainment Demonstrations" from EPA Assistant Administrator Mary D. Nichols to the Regional Administrators, March 2, 1995 (the March 2, 1995 memorandum).

We commend the Department of Environmental Protection and its Bureau of Air Quality for the SIP elements that have been adopted and submitted to EPA to date. However, while we recognize that Pennsylvania has made substantial progress in meeting its obligations under the CAA, not all of the required SIP elements have been submitted. This office intends to continue to work closely with the Department of Environmental Protection to undertake all necessary efforts to ensure that the remaining submittals are made as soon as possible in order to avoid the implementation of sanctions and the need to promulgate a Federal Implementation Plan (FIP).

By today's letter, pursuant to section 179(a), EPA is making a finding of failure to submit, for the Philadelphia nonattainment area, enforceable commitments to adopt additional measures needed for attainment and to submit the remainder of the rules to meet the rate-of-progress requirements pending the modeling results of the Ozone Transport Assessment Group (OTAG) for the Philadelphia nonattainment area. These enforceable commitments were required for Phase I of the two-phased flexible approach outlined in the March 2, 1995 memorandum. An enforceable commitment is one that has gone through the State's rulemaking process. In general, a finding is made when the State fails to make any submittal or the State fails to adopt and/or subject the required rules to public hearing as required under CAA section 110(1).

May 7, 1997

Please note that in a letter to you, dated May 2, 1996, we emphasized the importance of all the components of the Phase I requirements for the ozone SIP submittals and summarized the Commonwealth's progress on these submittals. We trust that you will continue to correct any deficiencies referenced in that letter.

If Pennsylvania has not made a complete submittal of the enforceable commitments to adopt additional rules needed for attainment and ROP within 18 months of the effective date of the final rulemaking setting forth the finding, pursuant to CAA section 179(a) and 40 CFR section 52.31, the offset sanction identified in CAA section 179(b) will be applied in the affected areas. If Pennsylvania has still not made a complete submission 6 months after the offset sanction is imposed, then the highway funding sanction will apply in the affected areas in accordance with 40 CFR 52.31. In addition, section 110© of the CAA provides that EPA promulgate a FIP no later than 2 years after a finding under section 179(a).

The 18-month clock will stop and the sanctions will not take effect if, within 18 months after the date of the finding, EPA finds that the State has made a complete submittal of an adopted 9 percent Post-1996 ROP plan and an enforceable commitment to adopt additional measures needed for attainment. In addition, EPA will not promulgate a FIP if the State makes the required SIP submittal and EPA takes final action to approve the submittal within 2 years of EPA's finding.

I emphasize that the findings made imply no judgment as to State intent; they are merely statements of fact that EPA is required to make under the CAA. EPA takes very seriously its responsibility to administer the CAA in a fair and just manner, and these findings are exercises of that responsibility.

I look forward to working closely with you and your staff to ensure that the CAA's requirements are met in a timely and effective manner without adverse consequences.

Sincerely yours,

W. Michael McCabe Regional Administrator

Enclosure

cc: James M. Salvaggio, Director Bureau of Air Quality

#### **ENCLOSURE**

This enclosure provides information regarding the status of Pennsylvania's submittals and EPA action. Where EPA, in a forthcoming rulemaking, makes a finding under section 179(a) for the failure of Pennsylvania to make a submittal, these findings trigger the 18-month clock for the mandatory imposition of sanctions under section 179(a). If EPA determines that Pennsylvania has made a complete submittal(s) within that 18-month period, the sanctions clock will be stopped. Please be advised that the effective date of EPA's rulemaking that makes the finding discussed herein is anticipated to be May 7, 1997.

#### ENFORCEABLE COMMITMENTS

Where required in the Commonwealth of Pennsylvania: Philadelphia ozone nonattainment area.

Status of required submittal: Phase I of the approach outlined in the March 2, 1995 Memorandum requires a commitment to adopt additional measures needed for attainment for the Philadelphia ozone nonattainment area. In addition, Phase I requires a commitment to adopt the remainder of the rules needed to meet the Post-1999 rate-of-progress requirements, pending the results of OTAG, for the Philadelphia ozone nonattainment area. According to the March 2, 1995 Memorandum, these enforceable commitments should have been adopted by the end of 1995, unless administrative or legislative scheduling considerations required an extension into 1996.



### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 841 Chestnut Building

# Philadelphia, Pennsylvania 19107-4431

Mr. J. Wick Havens, Chief Air Resources Management Division Pennsylvania Department of Environmental Protection Rachel Carson State Office Building

APR 9 1998

P.O. Box 8468

Harrisburg, Pennsylvania 17105-8468

Thank you for giving EPA the opportunity to comment on Pennsylvania's proposed Phase I Ozone SIP Submittal for the Philadelphia severe ozone nonattainment area. EPA commends the Commonwealth on the effort put forth in preparing this plan. However, EPA has several comments and recommendations regarding the proposed plan. Please enter the enclosed comments and recommendations into the official public record for this plan, which closes on April 10, 1998.

Please feel free to contact Marcia L. Spink, Associate Director for Air Programs, at (215) 566-2104, with regard to this or any other issue.

Sincerely,

Judith M. Katz, Acting Director

Air Protection Division

**Enclosures** 

cc: Mr. James M. Salvaggio

Customer Service Hotline: 1-800-438-2474

## EPA's Comments on Pennsylvania's Proposed Phase I SIP Submittal for the Philadelphia Severe Ozone Nonattainment Area (dated January 1998)

#### Rate-of-Progress (ROP)

In order to demonstrate that the Philadelphia area meets its ROP target in 1999, a table listing target levels, projected uncontrolled emissions, and projected controlled emissions is needed for the milestone year. To illustrate how the targets where reached, a table with projected uncontrolled and controlled emissions by sector is needed for 1999.

#### Transportation Conformity

For transportation conformity purposes, a single, easily-identifiable, clearly defined emissions budget is needed for each milestone year. The mobile source portion of this budget is used in conformity determinations.

### Stationary Sources

In order to take credit for reasonably available control technology (RACT) reductions from specific sources, Pennsylvania must ensure that approvable RACT rules for these sources have been submitted to EPA as SIP revisions.

#### **Emission Inventories**

EPA understands that this plan includes Pennsylvania's most complete 1990 base-year inventory for oxides of nitrogen (NOx), and that Pennsylvania considers this inventory to supersede all previous inventories. However, this is not indicated anywhere in the plan. In the plan, Pennsylvania should state that this NOx inventory supersedes all previously submitted 1990 base-year inventories. Furthermore, PA should withdraw any previous submittal from consideration as a SIP revision.

## EPA's Recommendations for Clarification of Pennsylvania's Proposed Phase I SIP Submittal for the Philadelphia Severe Ozone Nonattainment Area (dated January 1998)

#### Mobile Sources - General

Although PADEP has very thoroughly explained the methods used to project highway mobile source emissions in the uncontrolled and controlled cases for 1999, it remains a difficult task to piece together the various charts and tables summarizing the mobile source emissions derivation. After numerous iterations of ROP planning, EPA can still not fully understand or verify the Commonwealth's highway emissions projection.

EPA does realize that the use of the PPAQ emissions post-processor, coupled with a trip demand approach to VMT calculation and MOBILE modeling, makes documentation of highway mobile inventories a difficult task -- and verification next to impossible.

While this may be the case, EPA contends that further emphasis on explanation (in detail) of the highway inventory process would greatly improve the plan. For example, the mobile model sample input/output files contain numerous scenarios with cryptic names (which are not explained elsewhere), and which do not seem to correspond to any highway emissions summary table in the plan. While there may or not be any direct relationship between the sample modeling files and the final highway tables, without further documentation, there is no way of telling.

A case in point is the VMT mix supplied in the MOBILE sample input files for Philadelphia County. The modeled scenario VMT mixes do not correspond to the VMT fractions supplied for the same county in the table in Appendix V entitled "VMT, VOC, CO, and NOx by County by Vehicle Type". While PADEP's plan not be able to fully detail how this information is generated or how the PPAQ manipulates this information, the Commonwealth could describe the process more by which the information is generated more clearly.

The example above is only provided to demonstrate how difficult it is for EPA to understand the generation of PADEP's highway inventories, inventory growth projections, and control strategy reduction estimates. Without the ability to understand the means by which these reductions are calculated, EPA cannot begin to question or evaluation the Commonwealth's estimates for highway mobile source control measures, and therefore cannot assess the efficacy of the Commonwealth's plan.

Although the summary tables in Appendix V present the highway mobile information in a relatively clear, concise manner, EPA is left to accept the Commonwealth's estimates without further question. EPA has made similar general documentation and methodology explanation comments in the past, and PADEP has made marked improvement is summarizing the information. However, the rate-of-progress plans continue to focus on explaining the process for estimating emissions, but lack explanation of means by which the DEP has completed the process.

### Target Level Calculation - RVP/FMVCP Adjustment Factor

While PADEP is following the appropriate means for determination of the FMVCP/RVP adjustment factor, EPA is concerned with the magnitude of this adjustment for the period of 1990-1999 (39 tons/day). By 1999, this adjustment factor encompasses nearly 21% of Pennsylvania's base year highway VOC inventory (39 of 188 tons/day). Since in general, EPA cannot verify any highway mobile emissions, the purpose of this comment is only to ask the Commonwealth to attempt to better detail or to explain this adjustment (other than the general target level background discussion of how adjustment factors are calculated). EPA feels this is important due the magnitude of this correction in relation to some of the control strategies used to demonstrate reasonable further progress.

#### Highway Mobile Source Growth

Similarly, PADEP's plan indicates substantial growth in VMT, yet uncontrolled highway VOC emissions growth is calculated to be negative (a drop from 188 tons/day in 1990 to 177 tons/day in 1999). PADEP's narrative explanation in the phase 1 plan for highway mobile growth is limited to one paragraph -- simply explaining that highway growth is based on VMT growth and referencing section 3.3.4 of the 15% plan. However, that section of the 15% plan is an introduction to highway mobile source emissions estimation, and does not even discuss highway growth. Since highway emissions are slated to drop by over 5%, prior to any new controls and in the face of dramatic VMT growth, EPA requests that PADEP better document this section of the plan.

As for the how VMT estimates are generated, the 15% plan indicates that HPMS is used, based upon vehicle count information from PennDOT's Roadway Management System (RMS), and through use of PPAQ. Section 6.5 of the Phase 1 plan indicates that traffic demand modeling (TDM) was used in conjunction with PPAQ to determine VMT. Is the TDM based upon road counts and HPMS estimation means, or is it a form of trip demand (origin/destination-based) modeling? Since this section relies heavily upon PPAQ functions, it is difficult to understand how VMT and VMT growth were generated. Again, further narrative description of the process in this portion of the plan would avoid confusion. EPA wishes to ensure that there is no double counting of emissions from negative growth associated with pre-1990 emissions controls, and inventory adjustments to the target level calculation associated with pre-1990 FMVCP/RVP controls.

#### Shutdown Credits

Table 21 in section 7 of the plan lists reductions generated from source or process shutdowns, and indicates the reductions' status as banked or unbanked. As indicated on page 64 of the proposed plan, only 23% of banked shutdown credits are permanent reductions creditable for ROP. The table does not indicate whether the values listed for banked credits under the heading "1999 Reductions - tpsd" are the full amount of the shutdown reduction, or if they are the 23% that is creditable for ROP. After discussion with PADEP staff, EPA understands that the values are the 23% that is creditable for ROP. For clarity, this should be indicated in the table. Also, in order for EPA to verify these emission reduction credits, documentation is needed to clarify how these credits were calculated.

### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III 841 Chestnut Building Philadelphia, Pennsylvania 19107-4431

Mr. J. Wick Havens, Chief
Air Resources Management Division
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 8468
Harrisburg, Pennsylvania 17105-8468

Dear Mr. Havens:

Thank you for giving EPA the opportunity to comment on Pennsylvania's proposed Phase I Ozone SIP Submittal for the Philadelphia severe ozone nonattainment area. EPA commends the Commonwealth on the effort put forth in preparing this plan. However, EPA has several comments and recommendations regarding the proposed plan. Please enter the enclosed comments and recommendations into the official public record for this plan, which closes on April 10, 1998.

Please feel free to contact Marcia L. Spink, Associate Director for Air Programs, at (215) 566-2104, with regard to this or any other issue.

Sincerely,

Judith M. Katz, Acting Director Air Protection Division

Enclosures

cc: Mr. James M. Salvaggio

g:/user/share/pino/phil-phl.cmt

CONCURRENCES								
SYMBOL	3AP,21	3RC11	3APA M	3AP00				**
SURNAME	Pino Wif	Rodrigues	Arralla alala	Spink M	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		••••••	
DATE	8 April 58	CV 208 98	Castomer St	rvice Hotlin	:-:1-8 <del>00-43</del> 8-	2474	•	•••••
EPA Form	1320-1 (12-70)	A All	11/1	11470			OFFICIAL FIL	E COPY





### RECEIVED

MAY 2 7 1998

May 20, 1998

Air Protection Division (3AP21)

marin

Dear Pennsylvania Ozone Stakeholders Working Group:

It's time for another update on the progress of ozone reduction efforts.

As you know, DEP convened a regulatory negotiation for auto refinishing. The draft regulation is now in the hands of the Environmental Quality Board. I have enclosed the latest version.

In addition, a regulatory negotiation on degreasing concluded work on May 12. The group, made up of stakeholders from Philly and Pittsburgh and new players from the degreasing industry, wrestled with the full array of solvent cleaning operations - from large batch cleaning to simple handwiping - something no other state has been able to do. I will send a copy of the degreasing regulation as soon as I have it in hand.

Your work continues to serve as the benchmark for these efforts. You should be proud of your recommendations and success.

Please feel free to call should you have any questions.

Very truly yours,

Mike Hughes

Senior Program Manager

RECEIVED

MAY 2 6 1998

Division Director (3APOO)

#### ANNEX A

#### Title 25. Environmental Protection

Part I. Department of Environmental Protection Subpart C. Protection of Natural Resources

> Article III. Air Resources Chapter 121. General Provisions

Chapter 121. General Provisions

121.1. Definitions.

The definitions in section 3 of the act (35 P.S. §4003) apply to this article. In addition, the following words and terms, when used in this article, have the following meanings, unless the context clearly indicates otherwise:

\* \* \* \* \*

AUTOMOTIVE PRETREATMENT—A PRIMER THAT CONTAINS A MINIMUM OF 0.5

PERCENT ACID, BY WEIGHT, THAT IS APPLIED DIRECTLY TO BARE METAL

SURFACES OF MOBILE EQUIPMENT AND MOBILE EQUIPMENT COMPONENTS TO

PROVIDE CORROSION RESISTANCE AND TO PROMOTE ADHESION OF

SUBSEQUENT COATINGS.

AND MOBILE EQUIPMENT COMPONENTS PRIOR TO THE APPLICATION OF
TOPCOAT FOR THE PURPOSE OF FILLING SURFACE IMPERFECTIONS IN THE
SUBSTRATE, PROVIDING CORROSION RESISTANCE AND PROMOTING ADHESION
OF SUBSEQUENT COATINGS.

AUTOMOBILE PRIMER-SEALER—A COATING APPLIED TO MOBILE EQUIPMENT AND
MOBILE EQUIPMENT COMPONENTS PRIOR TO THE APPLICATION OF A TOPCOAT
FOR THE PURPOSE OF PROVIDING CORROSION RESISTANCE, PROMOTING
ADHESION OF SUBSEQUENT COATINGS, PROMOTING COLOR UNIFORMITY, AND

The No.			



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

#### **REGION III**

#### 841 Chestnut Building Philadelphia, Pennsylvania 19107-4431

Mr. J. Wick Havens, Chief
Air Resources Management Division
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 8468
Harrisburg, Pennsylvania 17105-8468

MAIL 0 , 1998

Dear Mr. Havens:

Thank you for giving EPA the opportunity to comment on Pennsylvania's proposed Phase II Ozone SIP Submittal for the Philadelphia severe ozone nonattainment area. EPA commends the Commonwealth on the effort put forth in preparing this plan. However, EPA has several comments regarding the proposed plan. Please enter the enclosed comments into the official public record for this plan, which closes on March 9, 1998.

EPA looks forward to receiving the Phase 2 plan for the Philadelphia area by April 1998, in accordance with EPA's December 29, 1997 guidance memorandum, "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM10 NAAQS," signed by Richard D. Wilson, Acting Assistant Administrator for Air and Radiation. Please feel free to contact Marcia L. Spink, Associate Director for Air Programs, at (215) 566-2104, with regard to this or any other issue.

Sincerely,

Judith M. Katz, Acting Director

Air Protection Division

Enclosure

cc: Mr. James M. Salvaggio

30%				

#### EPA's Comments on Pennsylvania's Proposed Phase II Ozone SIP Submittal for the Philadelphia Severe Ozone Nonattainment Area (January 1988)

#### General

1. The proposed plan and the OTAG results present a case that transport of ozone and its precursors from outside the modeling domain have a strong influence upon the ability of the Philadelphia ozone nonattainment to attain the ozone NAAQS. EPA's December 29, 1997 guidance memorandum, "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM10 NAAQS," signed by Richard D. Wilson, Acting Assistant Administrator for Air and Radiation, allows states to refine their air quality modeling once final NOx budgets are established by EPA's SIP call rulemaking regarding regional transport of ground-level ozone. EPA anticipates that Pennsylvania will submit this modeling as a formal amendment to the Phase II SIP. This plan amendment must also include any additional local controls identified by the refined modeling as needed for attainment.

#### Modeling

- 1. Executive Summary, Section 5. Modeling, page 39: This section should contain information directing the reader to detailed modeling information (i.e., model input, output files) necessary to reproduce the modeling performed for the Philadelphia Southern Central New Jersey Area.
- 2. Section 5.3.7 on page 51 should more specifically identify the controls that were modeled in strategies 1 and 2. Also, how are strategies 1 and 2 related to the strategies outlined in Section 6 of the Ozone SIP Technical Support Document Summary in Appendix V?
- 3. Section 5.3.7 should also contain more detailed information on what data bases (boundary conditions, emission inventories, meteorological data, etc.) were used in the modeling of the specific strategies. It would also be useful to relate boundary conditions used in the modeling to a specific OTAG strategy.
- 4. Section 5 should contain color tile maps of peak ozone concentrations for the base case as well as each strategy modeled for each episode day. It would also be helpful in understanding the benefits of controls, if difference plots for each strategy from the base case were provided.
- 5. It would be useful to include in Section 5 some of the emission sensitivity work done by Rutgers that shows the magnitude of emission reductions of NOx and VOC that may be necessary for the Philadelphia area to demonstrate attainment.
- 6. A paragraph should be added to Section 5 that describes why only two episodes were modeled. This paragraph should also state that the July 7-8, 1988 episode was one of the most severe in recent history and would most likely result in the most stringent control requirements of those episodes selected for the demonstration, therefore the fact that only two episodes were modeled is minimized.

- 7. Section 4 on page 42 should include a summary paragraph that states how ozone trends in the Philadelphia area provide a compelling "weight of evidence" argument that current controls of NOx and VOC are leading the area toward attainment. Continued progress toward attainment should be realized through the adoption of additional local controls and the expected regional controls from EPA's 110 SIP Call.
- 8. Section 5.3.2 Technical Protocol Establishment page 45: Language similar to the following should be added to this section, "The modeling protocol may be used as a general guide to how the modeling was conducted; however, subsequent changes in EPA guidance and the formation of OTAG have resulted in changes to episode selection, modeling tools and the data bases used in the final demonstration." At a minimum, the committee member lists should be updated in the protocol. This section should also indicate the protocol is provided in Appendix V.

#### Target Levels, Rate-of-Progress (ROP), and Conformity

1. Table 4, "VOC Target Level Calculation," on page 7 of Appendix III (Section A. Calculation of Target Levels), is meant to specify the factors used in calculating target levels. The factors listed are (a) adjusted baseline, (b) VOC reduction, (c) RACT Fix-ups, and (d) fleet correction. As stated on page 2 of Appendix III, target levels are calculated using the following formula: target level = previous target - required reduction - fleet turnover correction.

Therefore, the factors in Table 4 should be (a) previous target, (b) required VOC reduction, and (c) fleet turnover correction.

Furthermore, the target levels listed in Table 4, as well as on page 3 of the plan (Section 1. Executive Summary) are 389 tons per summer day (tpsd) for 2002, and 339 tpsd for 2005. These target levels should be 381 tpsd in 2002 and 329 tpsd in 2005, as established in the following calculations: previous target - required reduction - fleet turnover correction = target level

2002 436 - 51 - 3.81 = 381.19 (381 tpsd) 2005 381 - 51 - 1.56 = 328.63 (329 tpsd)

Where: 436 is the 1999 target level from the phase 1 plan.

51 is the required 9% reduction for both 1999-2002 and 2002-2005.

3.81 and 1.56 are the fleet turnover correction terms for 2002 and 2005, respectively.

- 2. In order to demonstrate that the area meets its ROP targets in 2002 and 2005, a table listing target levels, projected uncontrolled emissions, and projected controlled emissions is needed for both milestone years. To illustrate how the targets where reached, a table with projected uncontrolled and controlled emissions by sector is needed for 2002 and 2005.
- 3. For transportation conformity purposes, a single, easily-identifiable, clearly defined emissions budget is needed for each milestone year. The mobile source portion of this budget is used in conformity determinations.

4. The following table illustrates differences between Appendix III.E (Point Source Credit Documentation) and Tables 3a and 3b on page 29 of the plan, "VOC Reductions By Year (1996-2005)" and "NOx Reductions By Year (1996-2005)," respectively. While some differences are as small as 0.01 tpsd, some are as large as 1 tpsd. It is possible that many of these differences are the result of using different rounding conventions. However, the amount of credit taken for each control measure should be consistent throughout the plan.

#### Projected Point Source Emission Reductions in Tons Per Summer Day (tpsd)

2002		
Control Measure	Appendix III.E 3	Tables 3a & 3b
VOC RACT	18.54539 - 8.22120 = 10.32419 (10.32)	10.33
VOC Rule Effectiveness	48.28566 - 32.55187 = 15.73379 (15.73)	15.73
VOC Shutdowns	18.24080 - 15.64525 = 2.59555 (2.60)	2.59
Total VOC reductions	10.32419 + 15.73379 + 2.59555 = 28.65353 (28.65)* 165.33170 - 136.14941 = 29.18229 (29.18)**	28.6 <b>5</b>
NOx Shutdowns	7.51473 - 6.30865 = 1.20608 (1.21)	1.20
NOx MOU	95.36382 - 64.48224 = 30.88158 (30.88)	30.88
NOx RACT	20.96938 - 15.24121 = 5.72817 (5.73)	5.73
Total NOx reductions	1.20608 + 30.88158 + 5.72817 = 37.81583 (37.82)* 180.79805 - 142.98215 = 37.81590 (37.82)**	37.81
2005		
Control Measure	Appendix III.E	Tables 3a & 3b
VOC RACT	19.12036 - 8.50734 = 10.61302 (10.61)	10.57
VOC Rule Effectiveness	49.18912 - 33.20438 = 15.98474 (15.98)	15.99
VOC Rule Effectiveness VOC Shutdowns	49.18912 - 33.20438 = 15.98474 (15.98) 18.61494 - 15.80779 = 2.80715 (2.81)	15.99
VOC Shutdowns	18.61494 - 15.80779 = 2.80715 (2.81) 10.61302 + 15.98474 + 2.80715 = 29.40491 (29.40)*	2.87
VOC Shutdowns Total VOC reductions	18.61494 - 15.80779 = 2.80715 (2.81) 10.61302 + 15.98474 + 2.80715 = 29.40491 (29.40)* 168.64829 - 138.55233 = 30.09596 (30.10)**	2.87 29.43
VOC Shutdowns  Total VOC reductions  NOx Shutdowns	18.61494 - 15.80779 = 2.80715 (2.81) 10.61302 + 15.98474 + 2.80715 = 29.40491 (29.40)* 168.64829 - 138.55233 = 30.09596 (30.10)** 7.25400 - 7.30865 = -0.05465 (-0.05)	2.87 29.43 -0.06

Notes on the preceding table:

- 1) Emission reductions for Appendix III.E were calculated by subtracting the controlled emissions from the uncontrolled emissions listed for each control measure in Appendix III.E..
- 2) Shading indicates differences between Appendix III.E and Table 3a or Table 3b.
- 3) \* indicates that the total was calculated by summing the preceding three rows.
- 4) \*\* indicates that the total was calculated by subtracting the controlled total emissions from the uncontrolled emissions in the VOC or NOx point source total tables in Appendix III.E.
- 5. When the plan is submitted to EPA as a SIP revision, make sure that Section F (Area Source/Nonroad Documentation) of Appendix III includes controlled VOC area source emissions for 2002. In addition, controlled VOC area source emissions should be totaled for 2005.
- 6. The figures for projected uncontrolled VOC emissions should be consistent throughout the plan. On page 28 of the plan (Section 3.2.2. Milestone Year Emission Target Levels), Projected uncontrolled VOC emissions are 610 tpsd for 2002 and 608 tpsd for 2005. These figures are 632.72 tpsd for 2002 and 645.06 tpsd for 2005 on page 8 of Appendix III (Section B. Growth Calculations).

#### Stationary Sources

1. In order to take credit for RACT reductions from specific sources, Pennsylvania must ensure that approvable RACT rules for these sources have been submitted to EPA as SIP revisions.

#### General - Mobile Sources

1. The plan should contain a more thorough narrative description of the mobile source inventory and emissions reduction calculation methodologies. The plan seems to focus heavily on presenting the data and results from Pennsylvania's analysis, but contains almost no narrative documentation to explain and focus the results. Without clear documentation, and no real structuring of the data presented in Appendix 3 of the plan, it is difficult to evaluate the highway mobile source emissions credits.

For example, the plan presents a list of VMT, speed, and emissions summary information by county and by highway facility class. However, the plan contains no description of the process for generating any of this information, the source of the underlying data, and from where the information originated (e.g., how speeds and VMT were derived and applied on a county-wide basis, how the PPAQ makes use of speed and VMT information to conduct MOBILE modeling, etc.).

The plan lacks any narrative description of the operation of the PPAQ. In past plans, the Commonwealth has only submitted a flowchart describing the functions and process contained within the PPAQ. The plan should include additional narrative description of the purpose of the PPAQ, the process by which it functions, and exactly what information is fed into PPAQ. A

better description of the operation of PPAQ can only serve to clarify the use of this tool in the plan.

Presently, the highway mobile source portion of the plan is essentially nothing but a detailed summary of the numerical results of the Commonwealth's analysis, along with a list of control measures credited towards the plan and a description of those measures. A good narrative description of how the resulting inventories and claimed emissions reductions were generated would greatly help in reviewing this plan for approvability. Without clearer documentation, it is very difficult to follow the means by which the estimates were generated, although the presentation of the results stemming from the analysis are sufficiently detailed.

2. It is not clear from the plan which version of MOBILE was used, since the PPAQ sample runs submitted did not indicate which version of MOBILE is incorporated.

#### Enhanced Inspection and Maintenance Program

1. When analyzing the benefits from enhanced I/M, it appears that the PPAQ is utilizing MOBILE5a\_H, using an alternative I/M credit deck to model the benefits of ASM 5015. This was done by selecting 3 as the test type, or loaded idle testing, within the MOBILE I/M program line. However, it is unclear what credit deck is selected, since one is not listed on the I/M program line. It must then be assumed that the MOBILE modeling files used by PPAQ have been updated to include the appropriate IMDATA?.D credit deck.

Since modeling of ASM, and other I/M program features, is difficult using MOBILE5a\_H, EPA recommends that MOBILE5B be used in modeling rate-of-progress, to avoid the potential for error. EPA has found that MOBILE5a\_H lends itself to error, which can be difficult to detect without performing verification modeling.

#### Area Source Measures

1. In the calculation performed to determine reductions from Stage II Vapor Recovery (Appendix III, p.22), it is unclear what is represented by the 11.7 lb/1000 gallons (uncontrolled) emission factor. For the purposes of calculating the benefit, EPA expects that Pennsylvania would simply multiply its Stage II controlled emission factor by the amount of gasoline sold in the target year. This number provides the evaporative emissions total in the target year, which can be subtracted from the total uncontrolled inventory of evaporative emissions.

Otherwise, the plan should clarify exactly what is represented by the 11.7 lb/1000 gal emission factor, and how it was obtained. When calculating Stage II vapor recovery using a grams/gallon, rather than a gram/mile, MOBILE emissions factor, care must be taken to avoid double counting of reductions attributed to Stage II and other gasoline-related measures (e.g., reductions attributed to reformulated gasoline). Without further explanation of the derivation of the Stage II factors (i.e., the parameters set within MOBILE to generate the Stage II factors), it is difficult to

determine if there is any double counting taking place.

2. It is unclear how the Commonwealth estimated emissions reductions (Appendix III, p. 28) for new emissions standards for spark-ignition non-road engines (< 25 hp). The plan should discuss the source of the 32% percentage reduction (for phase I standards) claimed for this measure. In a November 28, 1994 EPA guidance memo entitled "Future Non-road Emissions Reduction Credits for Court-Ordered Non-road Standards," EPA estimates a 59.2% for both phases of the measure (in 2005).

Pennsylvania should document its source for any emissions percentage reduction, and list the calculations used to determine the emissions reductions for any given milestone year. The November 1994 guidance uses the following formula to determine these emissions:

Projected Emissions = 1990 emissions \* growth factor \* (1-% reduction)

Since the Commonwealth has no means to separate <25 hp equipment emissions from larger equipment emissions in the inventory, the Commonwealth's estimate is likely inaccurate. It is unclear how the Commonwealth determined that 98% of the lawn and garden inventory was generated by small engines covered by these standards. The assumption that full credit for the application of these standards to the entire lawn and garden category would be offset by other small engine inventory categories, from which no credit was claimed, is not valid. Without a more detailed inventory, it is impossible to tell whether this is a reasonable trade-off.

Finally, EPA's guidance estimates that there is a NOx increase from the introduction of these standards -- a nearly 98% increase in 2005 (from uncontrolled emissions). Has Pennsylvania added this emissions increase into its NOx inventory as growth?

3. The plan claims a 60% reduction in NOx emissions from Tier 1 emissions levels for certain categories of non-road diesel equipment having engines >50 hp. Affected inventory categories include: industrial, agricultural, and heavy construction. Pennsylvania did not cite the source for claiming a 60% reduction from this equipment from Tier 1 levels. Since Tier 1 levels have not been estimated, it is unclear how Pennsylvania arrived at these estimates.

In the November 28, 1994 EPA guidance memo "Future Non-road Emissions Reduction Credits for Court-Ordered Non-road Standards," EPA estimates a 23.5% NOx reduction (in 2005) from this control measure. Pennsylvania should detail the means by which it derived its estimated percentage reduction; or cite the source for the assumed reduction.

Pennsylvania should document its source for any claimed emissions reduction claims, and list the calculations used to determine the emissions reductions for any given milestone year. The November 1994 guidance uses the following formula to determine these emissions:

Projected Emissions = 1990 emissions \* growth factor \* (1-% reduction)

#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY



#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

#### 841 Chestnut Building Philadelphia, Pennsylvania 19107-4431

Mr. J. Wick Havens, Chief
Air Resources Management Division
Pennsylvania Department of Environmental Protection
Rachel Carson State Office Building
P.O. Box 8468
Harrisburg, Pennsylvania 17105-8468

Dear Mr. Havens:

Thank you for giving EPA the opportunity to comment on Pennsylvania's proposed Phase II Ozone SIP Submittal for the Philadelphia severe ozone nonattainment area. EPA commends the Commonwealth on the effort put forth in preparing this plan. However, EPA has several comments regarding the proposed plan. Please enter the enclosed comments into the official public record for this plan, which closes on March 9, 1998.

EPA looks forward to receiving the Phase 2 plan for the Philadelphia area by April 1998, in accordance with EPA's December 29, 1997 guidance memorandum, "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM10 NAAQS," signed by Richard D. Wilson, Acting Assistant Administrator for Air and Radiation. Please feel free to contact Marcia L. Spink, Associate Director for Air Programs, at (215) 566-2104, with regard to this or any other issue.

Sincerely,

Judith M. Katz, Acting Director Air Protection Division

Enclosure

cc: Mr. James M. Salvaggio

G:/user/share/pino/phi1-ph2.cmt

CONCURRENCES

SYMBOL 3AP21 3AP21 3RC11 3AP00

SURNAME Pino Arnold Rodrigues Spink Arnold Customer Service Hotling 1-800 438-2474

DATE 5Mand 98 0 3/6 Customer Service Hotling 1-800 438-2474

EPA Farm 1320-1 (12-70)

OFFICIAL FILE COPY

#### TORITAD STATES BRY BONNERTAL PROTECTION ACENCY



## NITED STATES ENVIRONMENTAL PROTECTION ACENC

Philadelphia, Pennsylvania 19107-4131

Mr. of Work Havens Chief

Air Resources Management Division:

Pennsylvania Department of Environmental Protection

Short out to 9

Harriston, Pannsylvania 17105-8468

Detailed Havens:

I hank you for giving EPA the opportunity to comment on Pennsylvania's proposed.

Place II Grone SIP Submittal for the Philadelphia severe occurs nonethingon area. EPA
commends the Commonwealth on the effort put forth in propering this plan. However, EPA
has several comments regarding the proposed plan. Please enter the enclosed comments into
the official public record for this plan, which sloses on March 9, 1998.

EPA Looks forward to receiving the Phase 2 plans for the Philadelphia area by April 1998, in accordance with EPA's Decamber 29, 1997 guidance menturandom, "Cuidance for Implementing the 1-Hour Ocone and Pre-Existing PM10 NAAOS," Signed by Kichard D. Milson, Asting Assistant Administrator for Air and Rediction. Please feel free to excited.

Marcia 1, Spirit, Associate Director for Air Programs, at (215) 566-2101 with regard to this any other uses:

- where a mid

Judith M. Katz Acting Director

STATE OF THE

or yeving . M. asmal all Marco

Hamilton D. P. Hamilton S. W. and E. D. Western Fred

Service | Servic

THE REST WATER THE PARTY AND



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION III

#### 841 Chestnut Building Philadelphia, Pennsylvania 19107-4431

	DATE: 9 March 98
TO:	Wick Havens
OFFICE:	PA DEP
FAX:	(717) 772-2303
PHONE:	(717) 772-3436
SUBJECT:	comments on proposed Phase II plan for the Philadelphia area
FROM:	Maria Pino, Environmental Engineer Ozone/CO & Mobile Sources Section
	PHONE: (215) 566-2181 FAX: (215) 566-2124
NUMBER OF	PAGES, INCLUDING COVER SHEET:8
ORIGINAL TO	O BE SENT: YESX NO
MESSAGE/CO	DMMENTS:
Please enter the	se comments into the official public record for this proposed plan.